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1. Education.- Psychology in

BY THE SAME AUTHOR

TWELVE GATES: A Study in Catholicity

THE MEANING OF EDUCATION

BY
JAMES H. SNOWDEN

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Education commences at the mother's knee, and every word spoken within the hearsay of little children tends toward the formation of character.—*Hosea Ballou.*

Let the soldier be abroad if he will; he can do nothing in this age. There is another personage less imposing in the eyes of some, perhaps insignificant. The schoolmaster is abroad, and I trust to him, armed with his primer, against the soldier in full military array.—*Lord Brougham.*

The true purpose of education is to cherish and unfold the seed of immortality already sown within us; to develop, to their fullest extent, the capacities of every kind with which the God who made us has endowed us.—*Mrs. Jameson.*

Education elevates a man above the pressure of material interests. It makes him superior to the pleasures and the pains of a world which is but his temporary home, filling his mind with higher subjects than the occupations of life will themselves provide him with.—*James Anthony Froude.*

Till we all attain unto a full-grown man, unto the measure of the stature of the fullness of Christ. —*Paul.*

INTRODUCTION

In beginning our study of the meaning and value of education as one of the chief goods of life it is encouraging to consider that there is enough of this kind of wealth for us all. Few are the things of which there is enough to go around. There are not enough diamonds in all the world to bedeck every bridal finger, nor enough pearls to throw a string of them around the neck of every queen of beauty. There are not enough houses, and there are not even enough clothes for all the people in the world.

It is physically impossible for us all to get rich, for if the total wealth of the world were equally divided among all its people, we would have only a few dollars apiece. There are a hundred millions of us in this country, but only one of us can be President of the United States at the same time; and so very many of us must do without that office—at least for the present. In any empire there is room for only one royal crown,

and any rival crown would be quickly put down, though its suppression might cost thousands of lives.

Material goods and external positions are strictly limited in quantity at any particular time, and whatever anyone gets from the common stock leaves just that much less for others. There is no way of avoiding or thwarting this physical fact and mathematical law, and this unrelenting limitation is at the bottom of much of the unrest and unhappiness and strife and tragedy of our human world.

But this principle does not apply to mental and spiritual goods. When one man discovers or develops a truth, he does not leave that much less truth for others; on the contrary, he enlarges the field of truth for all other minds. Newton in discovering the law of gravitation did not thereby enrich only himself and impoverish others, but he enormously widened the conceptions and multiplied the mental wealth of the world.

Truth is of such a nature that it cannot be shut up within a mind, but it must be shared in order to possess it fully.

We do not know a truth clearly and vividly until we impart it to others, for the very process of teaching or telling it to others clarifies and deepens and enriches it in our own minds. For this reason the teacher is always the best scholar in his own class and is constantly learning more than any other member.

Developed personality does not leave less room for other persons, but makes room for them and enables them to grow up toward the same height of attainment. Shakespeare, with his enormous genius and gigantic strides, did not crowd other dramatists off the stage; on the contrary, he made room for them and lifted them to a height they never would have attained had it not been for his contagious presence, for he inspired half a dozen minor poets to write dramas that can now with difficulty be distinguished from his own. Every great man helps to make other men around him great, and instead of crowding smaller men out of the world he causes them to grow to taller stature.

Education belongs to this class of mental and personal goods which are un-

limited in quantity and are multiplied for others as each one acquires them for himself. An educated mind is a mental infection in any community and imparts some of its own spirit of inquiry and methods of sound thinking to other minds. And truth, which is the field and sustenance of education, the bread on which it feeds and by which it grows, is as wide and unlimited as infinity and can be stopped by no terminal until it impinges on the frontiers of the universe and is lost in the omniscience of God.

There is no danger, then, of the stock of knowledge being cornered by any monopoly or exhausted by any omnivorous minds; the supply can never run short for any of us, and we may set out on our quest for education with the assurance that we are aiming at no unattainable ideal or visionary dream, but are turning our feet into a path in which there is room for us all and striving for a crown we can all win and wear.

For education is as democratic as human nature itself. It is not a special privilege of a few and does not constitute an aristocracy of minds, but is the possi-

bility of all. The poorest peasant boy can as surely attain unto it as the millionaire's heir or the king's son. Its door will open to any sincere and earnest knock and it asks for no golden key. Lincoln got it with a pine torch as his only light, and poverty cannot keep a resolute soul from this wealth and kingdom.

We are not, then, in this presentation of the meaning and value of education exciting false hopes in the minds of our young people and starting them out on a vain quest, but we are simply opening a vision that may become the victory of every one of them.

I

WHAT IS EDUCATION?

1. *Its General Idea.* The general idea of education is the leading out (*educere*) of our powers into full development. "Education," says Ruskin, "is the leading human souls to what is best, and the making what is best out of them."

Various definitions of it have been offered that are helpful. Plato said: "The purpose of education is to give to the body and to the soul all the beauty and all the perfection of which they are capable." John Stuart Mill wrote: "Education includes whatever we do for ourselves and whatever is done for us by others for the express purpose of bringing us nearer to the perfection of our nature." Herbert Spencer said: "Education is the preparation for complete living." Ruskin wrote: "Education is the leading human souls to what is best, and the making what is best out of them."

A recent psychological definition is:

"Education is the introduction of control into experience." This is a suggestive idea. Experience begins with the instinctive urge and activity of all our faculties, physical, mental and emotional, but if left alone they are wild-growing powers like weeds and run into all kinds of disorder. They need stimulation, guidance, and discipline. Education imposes upon us from without control that comes from the wider and wiser experience of others, of parents, teachers, schools, literature, and of the race. If an infant were left to grow of itself, cut off from its human kind, it would hardly develop into a human being and, in fact, it would quickly perish. But even if it were fed and protected, it would grow into only a half-human, half-animal creature: it is education that trains and disciplines it into a person and perhaps pushes it to the level and height of a supreme thinker or powerful personality.

Huxley has given us a well-known description of education as follows: "That man, I think, has had a liberal education who has been so trained in youth that his body is the ready servant of his will, and does with ease and pleasure all the

work, as a mechanism, it is capable of; whose intellect is a clear, cold, logic engine, with all its parts of equal strength, and in smooth working order; ready, like a steam engine, to be turned to any kind of work, and spin the gossamers as well as forge the anchors of the mind; whose mind is stored with knowledge of the great fundamental truths of nature and of the laws of her operations; one who, no stunted ascetic, is full of life and fire, but whose passions are trained to come to heel by a vigorous will, the servant of a tender conscience; who has learned to love all beauty, whether of nature or of art, to hate all vileness, and to respect others as himself."

This is a comprehensive definition and covers the whole man in body, mind, and heart. Education means the process by which this training is given, and it also means the result of this process in a fully developed personality.

The Christian ideal of the perfect man as set forth in Scripture includes the same elements: a pure, healthy body ("a temple of the Holy Spirit"), disciplined into servitude to the will ("I bring it into sub-

jection"), a developed mind, a noble heart, and an obedient will, all combined into symmetry and harmony, a full-statured, broad-visioned man ("a full-grown man") living in full fine relations with men and with God and growing up "unto the measure of the stature of the fullness of Christ."

The educated man, then, is no narrow or defective person that lacks any essential element of the strongest and finest manhood. He has no right to be ill-proportioned and misshapen, in any respect unlovely and repellent, round and rich on one side and shriveled and sour on another; but in him all excellent human qualities—the physical and the spiritual, the intellectual and the emotional, the passive and the active—should be combined and blended into symmetry and strength and fruitfulness. The highest attainable perfection of personality is the aim and end of education.

2. *Education a Growth.* Education is, therefore, a growth. We are each one born as a bundle of possibilities, a germ that has in it the capacity of endless development. An ignorant man is not yet

fully born, he is not yet unpacked; and the whole process of education from infancy to the end of life consists in unfolding these latent faculties into full-orbed development and power.

Education is not, therefore, a possession that can be inherited or bought or obtained as a special privilege, but it must be grown; it cannot be put on from without, like a new coat, but it must be developed from within. Everyone must grow this stalk of wheat in his own patch of ground, and this soil is his own soul.

Growth is a slow process and takes time; and the slower the growth the hardier and more valuable is the product. A mushroom springs up in a night, but an oak sinks its roots down into the soil and grips the rocks and builds up its trunk and throws out its branches through the years, and it takes the giant Redwood thirty centuries to push its top up three or four hundred feet into the sun. A solid education must strike its roots deep and patiently grow up through many years, and even all life, for its process is never completed in this world.

Already we are being warned against

short-cuts to this attainment. Young people are often impatient of slow processes and want quick results; especially are they eager to get to work and play their part in life. But it is as foolish to rush into life unprepared as it would be to begin to build a house without first laying a solid foundation or to attempt to sing or to play a piano in public without first learning how.

Many a person has stunted his personal development and injured his whole future by refusing to take time to get ready for his lifework Such haste is waste which strong crying and tears in after life cannot make good. Jesus himself took thirty years of preparation for only three years of work, and we are following his wisdom and patience when we take time to get ready for our work.

3. *Is It Right to Cultivate the Self?* We sometimes hear advice to the effect that self-cultivation is wrong in theory and bad in practice. Even so eminent an educator as Woodrow Wilson is quoted as saying, in an address to the National Council of Boy Scouts, that "character is a by-product," and that "a man who

devotes himself to the development of his own character will succeed in nothing except making a prig."

This is strange talk to come from a schoolmaster, for is not the whole process of education from the kindergarten to the university a cultivation of the self? Are we not to build up a good body, a disciplined mind, and a noble heart? Is not "a man to examine himself," and see wherein he falls short and bring himself up to higher standards? Are we not bidden to "love our neighbor as thyself"? Unless we first cultivate the self we shall have nothing of worth with which to love and serve others.

True love of self is simply appreciating and guarding and developing our own worth and right and dignity, and such self-love must precede and condition other love, we must get a soul before we can give any service. Of course we should be on our guard against conceit and selfishness and morbid self-consciousness; and, of course, we can develop and cultivate the self only as we serve others, for education is not an isolated personal but a social process and attainment.

We can develop our own personality only as we help to develop other persons; we can get education only as we give it. But this fact does not annul the complementary fact that self-development has its necessary place in our life and is our primary duty.

II

BEGINS WITH THE BODY

1. *The Body as the Physical Basis of Life.* Education begins with the body, for at bottom we are bone and blood and brain. The body is the basis of all our life, mental and moral as well as physical. Body and soul are intimately interwoven into a mystic unity, and neither of these parts of our human personality can be complete without the other. The body is the coarse material stem on which blooms the fine blossom of the spirit. And the breadth of the brain has something to do with the width of our thinking, and the volume and warmth of the blood with the fervency of the feelings and the force of the will.

Body and soul also constantly interact and are mutually sensitive and sympathetic to each other's condition and operations. Every change in the body instantly reports itself in the soul, and every change in the soul at once affects

the body. The body sends every sensory stimulus into the mind, and every thought and feeling and volition expresses itself through the body. The emotions paint themselves on the face, a sense of shame flooding it with scarlet, and fear blanching it white; and the will controls all the voluntary muscles and through them acts upon the world.

The body is thus a marvelous mechanism which is the nimble servant of the soul. Its hands and feet are the means by which man takes hold of the world and masters it, and his senses are so many fine feelers with which he reaches out and touches and interprets the world at every point and even feels his way out among the constellations to the most distant star.

Not only is the body a wonderful machine, but it also makes machines which are enormous extensions and reenforcements and refinements of its powers. Man's telescopes and microscopes are gigantic eyes which penetrate the depths of star spaces and peer down among molecules and atoms. His control of nature's energies enables him to pass with

incredible speed across continents and seas, to prowl around, like a terrible shark, under the ocean; to take to the air and outfly the eagle, and to transmit his thoughts and the very tones of his voice over continental distances as instantaneously as the lightning's flash. His dynamite and deadly gases enable him to split open mountains and blast with death every living thing over wide areas of country, and his powerful explosives and great guns have extended the reach of his arm to sixty miles and multiplied the punch of his fist millions of times. Humanity may well tremble at the mere thought of what the next great war may do; with airships loaded with bombs that will blot out cities and devastate countries. Man's wonderful and ever-increasing dominion over the earth and sea and air is the result of his mastery and extension of his own body, and there is no limit to this process.

2. *The Education of the Body.* No wonder, then, that education should begin with the body, and a sound mind in a sound body must ever be the starting-point and chief initial capital of an edu-

cated human being. Yet formerly the body was not included in the scheme of education and was not believed to have any necessary part or right to share in this process. It was thought, rather, to be the right thing for a student to be a pale-faced, hollow-chested, stoop-shouldered creature, panting for breath, and such things were almost taken to be signs if not proofs of one's being a scholar; but now they are only symptoms and evidence of bad breeding and wrong living.

It is now seen that a well-developed body, symmetrical and strong, supple and sinewy, with straight bones, hard muscles, broad chest, rich blood, graceful carriage, and trained skill, is a vital part of education and lies at the foundation of the whole business. This is the meaning of the large place now given to athletics in the schools and colleges. The gymnasium now stands side by side with the library, and athletics is required along with mathematics and ethics.

Physical education should begin in infancy and before birth—Oliver Wendell Holmes said we should start with our

grandmothers—and then should be continued through life. It now begins in the primary school with a physiological and medical examination of the child. Hair and scalp, eyes and ears, nose and throat, heart and lungs, stomach and liver, muscles and bones, every organ is examined and defects are noted and remedial action is taken. Inspection now looks into the sanitary condition of the school and sees that every window is in the right place and every seat of the right size and shape. The child is thus given a chance to have a sound body, and this greatly improves its chance of having a sound mind.

We are now realizing that ill health is a physical sin, if not personal, then hereditary or social, and that to permit a child to suffer from bad conditions is a social sin against its body and soul. The result is that our schools and colleges are now turning out fewer anemic weaklings, and more big, lusty fellows that have some brawn and breath that can back up their brains and carry them through life and stand the pace of to-day.

The great war disclosed an unexpected

amount of physical deficiency and inefficiency in our American manhood. A considerable proportion, sometimes half, of our young men were rejected outright on physical grounds, and most of them needed correction and reconstruction at many points. The results of military training in the camps were surprising. Many a boy that left his home stoop-shouldered and hollow-chested and shuffled along dragging his feet after him, came back erect and full-chested, with color in his cheek and sparkle in his eye, and walked with a firm elastic step, so that his whole personality had undergone a marked transformation, and his very appearance attracted the attention and excited the wonder of his friends. The discipline of six months had made a new man of him.

This bodily education is of fundamental nature and value. Physical health is one of our greatest national assets, immensely outranking coal and iron. But we should not wait for a war and military training before we begin this discipline, but make it a vital part of all our education from infancy through the primary school up to

the college and university. We are doing this in an increasing degree, and this is one of the chief improvements in our modern education.

Physical education, while it should not be overdone, and man should not be treated as though he were only an animal, thus has its rightful place in our educational life and has come to stay. Everyone should have an elementary knowledge of his body in all its organs and conditions of health and should give it constant attention. Anything that injures its fine mechanism and delicate tissues is a physical sin, and all harmful indulgences should be ruled out of life as so many sharp knives and deadly poisons that cut and destroy our vital organs.

Especially should everyone know and obey the laws of health as to proper food and air and sunshine and exercise and sleep, work and play. There are billions of cells in us, and when any of these are permitted to become dormant and then dead they are so much poisonous debris in the system and are the seeds of disease and death. There are simple exercises by which one can daily stir into activity all

these cells and thus keep the whole body alive and healthy.

And, of course, every one should train his body into some kind of skill that is useful in the way of productive work or recreation or artistic expression and joy. Skill in handcraft not only provides a means of making a living, but it also reacts on the mind and develops in it a sense of reality and practical efficiency that can hardly otherwise be attained and that is of high value in any field of life. "Health" is only another spelling of "holiness" and both are only variations of the word "wholeness," and this fact is an indication of how deep-seated and vital to our whole welfare, physical and mental and spiritual, is the education of the body and of what constant attention and care we should give to it.

III

DEVELOPMENT OF THE INTELLECT

THE intellect is the knowing power of the mind, and it unfolds into the faculties or activities of sense perception, concepts, reasoning, mental association, memory, and imagination.

1. *Sense Perception.* Sense perception is the consciousness of external objects when the mind is stirred into activity by the excitation of the senses. These are the organs of sight, sound, smell, taste, and touch, which are nerve ends differentiated and adapted to receive various kinds of sensory impressions. Each of these wonderful organs sends its distinctive kind of nerve wave or shock up to its special center in the brain, which is thus a central telephone exchange receiving and sending messages from and to every part of the world.

The mind now has the wonderful and quite mysterious power of interpreting or

experiencing these molecular changes in the brain as perceptions of the external objects producing them. When two or more perceptions arrive from the same external object, as the color, odor, and taste of an orange, these several percepts combine into a unitary percept or construct, which is the object as we know it in the mind. When an individual percept or construct, such as an apple, is released from its local context in consciousness and made to stand for or represent all apples, or the class or general idea of an apple, it is then called a concept.

These percepts and concepts are the representatives in our minds of the realities of the objective world, and it is therefore of the first importance that they represent them accurately. They are the constituent elements or cut stones or pressed bricks out of which we build our world. But if the bricks in a building, or even one brick, is of the wrong size or shape or is warped, it may throw the whole structure out of plumb and may even endanger its stability.

We thus see the fundamental importance of forming correct percepts and con-

cepts. Any inaccuracy or error in them, caused by inattention, ignorance, mental blindness, self-interest, prejudice, or passion, will throw us out of gear and right working relations with reality; it will ramify and pervert all our ideas and plans; and it may undermine and ruin our whole structure of thought and life.

Keen and accurate senses are a high attainment and are the basis of right thinking and successful achievement in every field. The way we see things determines the way we say them, and thus accurate observation is the foundation of truth and truth-speaking. The way we see and hear and touch things is also the way we endeavor to control and use them; and so if our observation of them is loose and inaccurate and a misfit, we shall miss connection with reality and wander around blindly in the world. Trained senses are of primary and immense importance as the means of sound thinking and practical mastery of things in life.

We should then give the greatest care to the education of our senses. In seeing things we should train our vision so that we shall see clearly and correctly, and not

see blurred and blotted, distorted and perverted images of them; and so with all the other senses. In seeing accurately the shape of a leaf or the color of a bit of ribbon or the letters in a word or the figures in a problem we may be determining something of far-reaching importance.

We should beware of mixing up our subjective opinions and prejudices, and especially our own interests and desires, with objective reality, and thus shaping and coloring it to suit our own ends. Of course we must interpret things in the light of our own knowledge, and this is a reason why we should be constantly stocking our minds with richer stores of knowledge that we may ever see a richer world. In a sense we make the things we see, for we contribute to them the contents of our own minds, so that we see things not only as they are but also as we are.

But this process does not justify us in contributing any false color or element to our perception. We might suppose that as we all have the same senses we would all see and hear the same things. But

this is not so. Our senses are subject to growth and education, and we all see things according to our own mental development. In fact, everyone sees his own world; and to one it may be a meager and colorless world, and to another it is something rich and splendid.

Just to perceive reality as it is: this is the foundation of truth and honesty; it goes deep into our character and success in life; and we should give to it our utmost training and care.

2. *Reasoning.* The process by which the mind works with its percepts and concepts is its reasoning power. This consists of comparing, discriminating, analyzing, and classifying its percepts and concepts, or its images of objects and its general ideas, so as to discern their relations, logically combine them into larger units, trace their connections and especially their causal links, and deduce their consequences; and thus we build up our knowledge into judgments and propositions and systems and draw practical conclusions.

Thus starting with tiny visual images in his eyes and percepts and concepts in his

mind, the astronomer combines these into grand generalizations and constructs a sublime system for the whole stupendous heavens. Every other scientist in like manner perceives and construes the facts in his special field, and thus our knowledge grows from more to more. Each one of us thus reasons out his own conclusions and plans and purposes and builds his own world.

The judgments we form in our minds by our reasoning are the real tools with which we work, the hands and feet with which we actually take hold of the world and move and mold it to our purposes. It is, therefore, of primary importance that we learn to reason correctly and work out right judgments, for a wrong judgment is a broken rail or an unbridged chasm in our track that will inevitably throw us into the ditch.

The reason one man succeeds and another fails generally is that the successful man forms right judgments that run before him like a steel track to carry him with safety and certainty to his objective, whereas the unsuccessful man forms unsound and visionary plans that go to

pieces on the rocks of reality. Education at bottom is thus good judgment, or common sense raised to its highest power, and we must develop and exercise this power or our doom will be upon us.

3. *Mental Associations.* Association of ideas is the tendency they have of clinging together so that when one arises in the mind it brings others with it. It is our constant familiar experience that one object or idea suggests another. The sight of a raincloud suggests the idea of an umbrella, and this idea may suggest the fact that the one we have was borrowed from a neighbor, possibly without his consent or knowledge. The sight of a little lock of hair or a glimpse of the old home crowds the mind with a thousand fond recollections too deep for tears. When any idea enters the mind it quickly draws to itself a cluster of associations, as when a magnet is thrust into a keg of nails it comes out thickly incrusted with the bits of iron.

These associations often seem accidental and whimsical, but they are really governed by beautiful laws that spin threads of connection between ideas that at first

seem to have no possible relation. The most common of these laws are contiguity in time and place, similarity and contrast, and causal connection. Objects and ideas that have been experienced together once are apt to appear together again, and any object tends to suggest its likeness or contrast, or cause or consequence.

Every object and idea and word is surrounded with a fringe or atmosphere of associations, and as every mind has its own stock of knowledge, words and ideas have very different meanings and suggestions for different minds. The idea of a prison has a vastly different connotation or meaning for a convict than for one who has never been inside prison walls, or the word "music" for the musician than for one without musical training or sense. These associations give breadth and depth and wealth of meaning to words and objects as the overtones in music give character and richness to musical notes.

It is the number and variety of the associations with which our minds are stored that constitute the width and wealth and power of our mental life.

Every mind organizes around an idea its entire contents. It perceives every new truth in the light of and brings it into relation with its existing knowledge, a process which is called apperception.

One mark of a man of genius is the immense range and variety of his associations by which he calls the whole world so far as he knows it to his aid to illustrate and illuminate his ideas; and the poverty and impotence of an ignorant or feeble mind is the meagerness of its associations. Multiply your associations, store your mind with large stocks of facts and ideas through observation and reading, and you will thus have a reservoir in your mind that you can tap on any subject and draw forth streams of thought and power. This is one result and value of education.

4. *Memory.* Memory is the conserving power of the mind, its capacity to store up and retain and recall its experiences. It is the treasure house of life in which all its past is packed away and out of which our associations emerge; it is the thread of continuity that binds all our days together into conscious unity. Without the power of memory we would not

be conscious of our past and would not even know ourselves as identical persons from day to day. It is thus the spinal column of personality.

While memory is not the highest power of the mind and is related to conservation rather than to initiative and progress, yet it is fundamental and enters vitally into our whole life. Its cardinal virtues are quick reception, vivid impression, tenacity of retention, and readiness of recall, and it thus puts our whole stock of knowledge and experience at our fingers' ends. It should be disciplined and strengthened in early life and trained into an expert librarian and ready servant that will on demand produce any fact or idea from the stack room and pigeon-holes of the mind.

5. *The Subconsciousness.* The subconsciousness is that part of our mental life that lies below the threshold of consciousness. The conscious mind is subject to great fluctuations in its volume and level, and from the heights of intense and glowing thought and feeling it sinks down through dullness and drowsiness and sleep into a state of inactivity of which no memory remains. Memory has its store-

house in this deep. All our mental associations and past experiences and habits and instincts are packed away in its receptacles and emerge at call from these hidden chambers in this underground world of the soul.

There is reason to think that this subconscious life of the soul is large compared with its conscious life. As seven eighths of an iceberg is under the surface of the sea, so the greater part of our life is submerged in these depths. This is the night life of the soul, full of shadows and ghosts and stars.

The subconsciousness plays a part of immense importance in our life. All our past and even our heredity and racial ancestry are sleeping in these deep chambers so that nothing is ever lost out of our life. Up out of this huge cellar come swarming through its trapdoors and back stairways of memory and association the experiences of the past to reenforce the present. Suggestion has the power of tapping this subterranean reservoir and letting it gush up in jets of thought and feeling.

Everything we put into our souls will

sooner or later come out of them. Long years afterward on the most unexpected occasion and in the most startling ways, "old, unhappy, far-off things, and battles long ago" will come thronging up out of this dark chamber to strengthen and comfort us, or, like ghosts out of their graves, to trouble and plague us. The admonition of psychology and education at this point is, "Keep thy heart with all diligence; for out of it are the issues of life."

6. *Imagination.* Imagination is the picture-making power of the mind. It begins with memory images, which are bits of imagination, and it constructs images or pictures of objects and scenes from the stores of memory.

A deeper use of the imagination is its power of realizing objects that lie beyond the immediate range of the senses and contact of the mind with reality. It is the mental process by which we translate symbols, such as words and mathematical signs which only stand for things, into the meaning and power of the things themselves. Thus in studying geography and history the mind has certain information about places and events that are not

immediately before it: imagination takes these statements, which are little more than symbols, and translates them into images which we see almost or altogether as vividly as though the realities themselves were present to us; it clothes these skeletons with flesh and blood so that they breathe and move.

Knowledge is never digested and assimilated into our thought and experience, it never becomes alive and moves us, until we thus turn it into pictures or vivid images that may be as vital and vigorous as the living realities. In all our studies we should visualize our knowledge and turn it into living experience.

A still higher activity of this faculty is the creative imagination which constructs pictures, plans, ideals, and visions of its own; and thus

> "... bodies forth the forms of things unknown,
> Turns them to shapes, and gives to airy nothing
> A local habitation and a name."

It is the creative imagination that produces all the glories of literature and art and all the great achievements of men.

Men of genius are eminently the chil-

dren of their imagination; they see visions that unveil the beauty of the world. A poet sees fairy fancies and grand cathedrals of poetic thought, and, with his "eye in a fine frenzy rolling," he puts them into immortal lines. The painter sees in the gallery of his imagination a picture of fair features and glowing colors and deep meaning, and his brush copies it on canvas. A sculptor sees an angel in a block of marble, and his chisel sets it free until it begins to breathe. A musician hears in the chamber of his heart sweet strains and grand harmonies, and he flings them out through his voice or his instrument upon the air. It is by the same power that we frame our plans and purposes, set up our ideals, and see visions which we then strive to realize in conduct and character.

Imagination, then, is no visionary and vain exercise of the mind. It is true there is a form of this faculty, the fancy, that does cut loose from sober reality and soars off on a light and airy wing; and such imagination may lead us into daydreaming in an unreal world; and when this is indulged in to excess it is apt to become

unwholesome and harmful, weakening the will for common work and breeding discontent.

But imagination proper is the most powerful creative faculty of the mind. It is by this power that man dreams dreams and that over his path hover visions that coax and woo him on to larger and lovelier things. He follows their gleam, he hitches his wagons to their stars and rises from common dusty roads to celestial highways.

The world has learned to beware of how it stands in the way of imagination: that invisible impalpable power may have in it more than ten thousand bayonets or a million tons of dynamite and may crush mountains, shape the centuries, and create a new world.

7. *The Workshop of the Mind.* We have thus looked into the workshop of the mind and noted the mental machinery by which it turns out the products of thought. The senses perceive the objective world, reasoning combines percepts into judgments, association enriches any object in the consciousness by causing all affiliated ideas to flock around it, memory

conserves the experiences of life and stores them away in the subconsciousness, and imagination paints pictures in the mind and creates new ideals which lift life to higher levels.

It is the work of education to develop and train all of these intellectual faculties into full maturity and skill. This is done through the courses of study in the schools and by the exercise of the mind by the student in mastering these subjects. The mind grows by use just as do the muscles of the body, and knowledge is the mental food that feeds and develops it.

All the faculties of the mind have an affinity and craving for truth, and they have an enormous capacity and appetite for it which can never be satisfied. The human mind is omnivorous and will ravage all fields of truth and eat up the earth and sun and stars. The student must whet up his mental appetite and devour great quantities of facts and ideas and thus feed his mind on the most liberal diet.

But even more important than acquiring large stocks of knowledge is the developing of his power to digest and assim-

ilate facts and ideas into his own experience so that his knowledge will not be the second-hand contents of other men's minds and of his memory, but the first-hand products of his own mental activities. Memory may be only a pipe tapping and draining off other men's reservoirs of knowledge, but reasoning is a fountain within the mind ever springing up in new ideas of its own.

To this discipline of the mind the student must give his patient study through months and years. If the work is a drudgery to him, he must endeavor to kindle his interest in it so that it will become his delight. If he will hold his mind on a subject, it will begin, under the play of mental association, to gleam with light and to develop new points of interest until it will become the glowing focus and hot spot in his consciousness and may become his enthusiasm and passion. Mental power is a long and slow growth, and he who would acquire it must pay its price in toil. There is no royal road or short-cut to education, and only by becoming a slave to its demands can one become its master.

8. *Knowledge and Intelligence.* We may note, in leaving this part of our subject, the important distinction between knowledge and intelligence. We are apt to confuse the two and to think that one who has his mind and memory stored with large funds of knowledge is necessarily an educated person; but such a person may have very little education or mental power, just as a furnace may be crammed with fuel and yet contain little fire and heat: in fact, the fuel may only smother the fire; or the mind may be stuffed with knowledge as the stomach may be overloaded with food while it has little digestive power.

Knowledge is information: intelligence is developed and disciplined mind. Knowledge is a possession: intelligence is a power. Knowledge does not necessarily produce or imply intelligence: intelligence produces knowledge. Knowledge is static and passive: intelligence is dynamic and active. Knowledge receives: intelligence creates. Knowledge handles the old and familiar and is disconcerted with the new: intelligence is stimulated by the new and meets and masters novel situations and

problems. Knowledge drills, and intelligence thrills. Knowledge is useful and necessary, great widths and immense stores of it in the mind by so much enlarge and enrich life, but intelligence is the principal thing, for only intelligence is power, and with all our getting in education we should develop intelligence.

IV

THE SENSIBILITIES

THE sensibility is the power of the soul to experience feeling, or a state of excitement. The feelings are an infinite complex, shading into one another like the evanescent hues of a sunset, and they do not admit of such exact analysis and classification as the faculties of the intellect. They fall, however, into several broad classes.

1. *Kinds of Feelings.* Sensations are feelings caused by direct physical action on the nerves. They include, first, the excitations of the senses. The degree of feeling in the senses varies, being very slight in normal sight and most pronounced in touch. Besides the senses, there are numberless organic feelings throughout the body. Every sensory nerve in the body is sensitive to irritation and is ready to respond with its peculiar feeling.

A second general class of feelings are

the emotions, which are feelings caused by the presentation to the mind of an object or idea. The sight of an enemy may throw the soul into a violent state of fear, and of a friend may kindle it into a glow of love or joy. Every object or idea tends to produce its own peculiar feeling, and there may thus be as many shades of emotion as there are objects; but they fall into a few general classes, such as fear and hope, hatred and love, joy and sorrow, antipathy and sympathy, the sublime and the ridiculous, aspiration and reverence, and these may range in degree from a mere tendency or slight stir of feeling to the greatest intensity.

Feelings have a pain or pleasure tone, which is often their most distinctive and compelling characteristic. Every feeling, whether of sensation or emotion, has this quality. The physical sensations are attended with the pains and pleasures of the senses and appetites or organic feelings, and a mere idea may flood the soul with pleasure or send flames of agony leaping through it. All of our feelings may be arranged and marshaled under these two master captains of the soul.

Every person also has a prevailing emotional tone or disposition which is a native inheritance and is persistent through life, though subject to some control and slow modification by the will. A temperament is the emotional pitch to which one is keyed and is the tonic note of all his music. It is the sounding-board which gives quality to all his moods, as sanguine or phlegmatic, choleric or melancholy. It is an emotional lens that gives character and color to all his experiences. All our mental states sift through our peculiar temperament, as light through a stained-glass window, and are tinged with its hues.

2. *Uses of the Feelings.* The broad use of the feelings is to promote the volume and value of life and give it interest and motive. Pleasure attends and stimulates such activities of body and mind as in the long run are conducive to life, and pain accompanies such activities as in like manner injure or hinder it.

It is the feelings that give us a sense of the value of objects. Pure intellect perceives facts and relations, but not worths. One object is as truly a part

of reality as another, and the intellect thinks only in terms of factual existence and not of value. But the interest of life resides in our feelings. It is not until our ideas strike these mystic strings and wake them into music or discord that they excite our interest. The feelings are like the box of the violin or the sounding-board of the piano: the strings would give forth only thin and insignificant tones if they were not reenforced by these resonators which sympathetically catch up their vibrations and give them volume and depth, richness and sweetness. And so out of our feelings arise the joys and sorrows, the triumphs and tragedies of life.

The feelings are also the immediate motives that move the will. There is no tendency for the will to act until the feelings pour their flood upon it as a stream upon a wheel, or as steam into the cylinder upon the piston that drives the engine. Objects and ideas generate feelings of sensation and emotion, and these accumulate volume and pressure until they overcome the inertia or indecision or opposition of the will and push

it into action or explode it as a spark explodes powder. Pain and pleasure especially are imperious forces that move the will and guide and govern life.

3. *The Education of the Feelings.* The feelings are subject to development and control, refinement and enrichment as are our other mental faculties. The emotions are generated and governed by our ideas, and our ideas are largely subject to our control, and thus we can select and intensify and control our emotions. By suppressing and starving unworthy feelings and stimulating and feeding good ones we can slowly acquire a wholesome and happy, unselfish and noble emotional disposition.

Reading literature charged with pure and deep emotion is a good education for the feelings. It develops them in strength and sensitiveness and trains them in that delicacy and refinement which we call taste and which is the mark of culture and fine character. We can also develop proper feelings by practice and drill them into the heart as habits.

Less attention has been given in education to the feelings than to the intellect,

and yet they are a deeply vital part of character and life. The lack of fine feelings is likely to indicate selfishness and boorishness, and no one can be counted educated who does not have this part of his nature richly developed and properly trained.

V

THE TRAINING OF THE WILL

THE will is the power of the soul to control itself in its thoughts and feelings, decisions and actions. The whole consciousness is a stream of activity, sinking into the subconscious deeps in sleep and then rising into a tumultuous torrent and overflowing the banks of the soul.

This stream, however, is not an ungovernable flood, sweeping everything before it, on which the will floats as a helpless log or drifts as a boat without engine or rudder. The will has a large control over the stream and flood; it has a rudder in its hand and an engine in its boat by which it can steer and drive it in any direction to its own self-chosen destination.

1. *The Attention.* The will first exercises its power in attention. As the word means, this is a "stretching" or striving of the mind toward an object. The mind can pick out any particular

object or idea from among the swarms of ideas in the consciousness and concentrate its attention upon it, while other ideas are crowded into the background.

Once the attention is fixed on an object a wonderful process sets in. The associations of the mind begin to gravitate to the central object in an increasing mass. At the same time these associated ideas kindle their appropriate emotions, and thus add their fuel and fire to the central mass and turn it into a blazing heap that becomes the burning focus of consciousness. The attention is thus like a searchlight which can be swung around over a city or landscape at night and wherever it stops there the spot on which it rests becomes visible and brightly luminous, while other parts of the landscape fall back into the night. Wherever the attention is stopped and held in the field of consciousness, that becomes the glowing center of the mind.

Now, this act of attention is the primary power of the mind and goes far toward measuring one's whole mental ability. Really, the only thing we can do with our mind is to hold it on an object until

our associations gather around it and pour their fuel upon it and set it on fire. The student should give his utmost endeavor to developing his attention so that it will tenaciously hold his mind on a subject and not let it constantly wander off, perhaps with the fool's eyes, to the ends of the earth. "This one thing I do" should be our determination.

We cannot force ourselves to do a thing by a sheer act of will: we can only hold our attention on it until it grows and generates enough interest and feeling by its own associations to set the will in action. The self-control by which the will can concentrate the mind on a subject and stick to it is the root of education and of personality; and education should aim to develop and discipline this primary power of attention.

2. *Motives.* This brings us to the fact, familiar in our experience, that the will is not an arbitrary action of the mind, but a rational process, taking place under the play of motives. A motive is any influence tending to move the mind, and motives are of several kinds.

The first motives are instincts. An

instinct is that which instigates or "stings" us into action, as the word means. It is an inherited constitutional tendency to act in a certain way when the appropriate condition or stimulus is present. It is a reflex response, a latent impulse or coiled-up spring ready to act as soon as it is released.

The important fact about instincts is that they express and satisfy the fundamental needs of life by their automatic action. They urge us into action along the line of these necessities before we are able to reason them out and consciously supply their demands. It is imperative that we should eat and sleep and work and play, and nature does not wait for us to find out these needs and discover and supply the means of satisfying them, but it has put springs within us which are released at the touch of the proper natural stimuli and push us into action before we reflect on the process. Yet in time these instincts emerge into the field of consciousness and reason, and then they are subject to and often need enlightenment and education and control.

Next, ideas of action are incipient mo-

tives. The moment we think of an action we experience an inclination to do that thing, as when we look down from a height the idea of jumping down suggests itself and we then feel an impulse to give way to the idea. Ideas become proper motives only when they are duly considered and accepted.

Our conscious desires and ends are our proper motives. A desire is a complex mental state consisting of an idea and a feeling, an idea of an end or object to be attained and a feeling of craving for it, or, it may be, antipathy to it. Desires cover the whole field of life, embracing the infinite manifold of our cravings. The two master desires are for the possession and enjoyment of good and for escape from evil, these corresponding with the two primary feelings and forces of pleasure and pain.

These motives are subject to growth. They may appear in the mind as mere sparks of light or germs of perception and desire, but as the mind dwells on them associations begin to deepen and enrich and intensify them and thus they grow into a luminous center that fills the whole

soul with light and heat and drives the will into action. Our motives are thus subject to education and control.

3. *The Freedom of the Will.* This leads us to the important point of the freedom of the will or of the soul. Motives are not forces thrust upon us from without, but they grow up within and are our own children. They are not only born of our own nature, but they are subject to our deliberation and selection. They compete for our approval, but they do not compel it. We consider and weigh and evaluate them and choose them according to our own standards.

We not only choose, but we make our own motives and determine their weight, for it is in our own power to strengthen or weaken them by increasing or decreasing their associations so that they grow into overmastering heat and power or wither into paleness and impotency. We can feed a motive into fatness and lusty strength, or we can starve and strangle it to death; and in this power lies the very core and certainty of our freedom and responsibility.

The will is thus the captain of the soul

and the crown of its sovereignty, pregnant with victory and glory or defeat and shame. It builds man's world, tossing mountains out of his path and creating a vast splendid civilization, carves character and determines destiny; and every man, however humble and bound in by circumstance, is, not a wind-blown bubble on the sea or atom in the storm of the world,

"But this main miracle, that thou art thou,
With power on thine own act and on the world."

It is, therefore, one of the chief aims and ends of education to develop and train the will into self-control in the power of attention, in the proper evaluation and selection of its motives, and in the intensification of them so that they will act with decisive force. Such a will is the real measure of a man. A strong will is not to be confused with a wayward, willful, selfish, and passionate will, for these traits are the marks of a weak will. A man in convulsions is not a strong man though it may take ten men to hold him: he is the strong man who can hold himself. "He that is slow to anger is

better than the mighty; and he that ruleth his spirit than he that taketh a city."

The three fundamental faculties of the soul, as we have now seen, are intellect, sensibility, and will. This is their logical order of action, though they are interblended and simultaneous in their activities, one of them usually being dominant at a time in consciousness.

The human soul is thus a three-cycle engine. In normal behavior intellect acts first and produces thought; thought kindles feeling; and feeling moves the will. The action of the will results and rests in a state of satisfaction, which is the end of the particular movement. But this state or end at once suggests or stirs another movement of the intellect, and then the process begins all over again; and thus the mind keeps turning through its cycle and runs its endless round.

The observance of this order is of the first importance in education and in life. The rational way of controlling ourselves and achieving our ends, developing our personality into full-grown maturity, and building our character and determining

our destiny is to choose and develop the proper ideas and ideals, which are then to be enriched and intensified until they generate the appropriate feelings and motives, which will then determine and drive the will into action. Our responsibility roots back in our ideas and begins with our primary attention by which we make our decisive choices.

VI

THE EDUCATION OF THE SPIRIT

If education were to stop with the body and the mind, it would have reached a considerable height, but not a summit with a clear sky over it and stars shining high above it. It would still be a building that had a good foundation but had not risen above the second or third story. It would only be a hut squat on the ground that could not house a lofty human spirit.

Without the higher life to control and inspire the lower life, education is only a danger, and may be a curse. It is then only a sharp and powerful tool which a bad man can use as skillfully and efficiently as a good man. There are university-trained bank embezzlers and burglars as well as college-trained bank cashiers and presidents. Such an educated man may be an educated monster, a very devil of cunning and selfish and malignant power.

Education divorced from conscience and character lay at the root of the materialism and militarism of Germany and helped to lead her into the unspeakable crime and ruin of the Great War. A godless education is the curse of any nation that nurses this viper in its bosom.

The faculties of conscience and faith, of right character and conduct, of righteousness and reverence, are as much involved and as rightfully have a share in the process of education as the organs of the body and the faculties of the mind. The heart is biologically older than the brain and has deeper and more vital needs and aspirations. The deep instincts and mystic feelings of the heart are vastly more important in governing our character and conduct than is our thinking; for life is immensely more than logic and it is surprising how little part our reasoning really plays in our practical decisions and conduct.

Plants and trees blossom at the top, and so does the human spirit. In its moral and spiritual nature it flowers out into its finest and richest life. This nature, then, ought not to be neglected

while the lower nature is being developed, but the spirit also is to be cultivated and enriched.

Developed conscience is sensitiveness to right and wrong, with a resolute determination and habit of spurning the wrong and following the right. It is an intensely social sense, having due and strict regard to the rights and interests and welfare of others. It crystallizes its decisions and principles into habits and dispositions which become the permanent states of the soul out of which all its actions spring. It subordinates appetite and passion and self-interest to its decision and control. Conscience thus comes to its splendid coronation and is clothed and crowned with royal rights and power.

Religion is our conscious relation to God. All men sustain constant and intimate unconscious relations to God, as in him they necessarily live and move and have their being. They can no more escape this relation than they could slip out of the grip of gravitation or fly above the limit of the atmosphere. "All things are naked and laid open before the eyes of Him with whom we have to do," or "with

whom we do business." All men are constantly doing business with God. Only when this relation emerges in the field of our conscious life and becomes obedience and fellowship does it become religion.

All things run up to God for their final explanation and completion. "We cannot study a snowflake profoundly," says Professor Tyndall, "without being led back step by step to the sun." Strange that the great thinker did not see that another step would lead us up to God; for "the loaf" takes us back logically, as well as poetically in Dr. Maltbie D. Babcock's verse, through the snowy flour and the mill and the wheat and the shower and the sun up to "the Father's will."

The human spirit calls for the Father of Spirits as the earth calls for the sky, the flower for the sun, and the child for the father. Human life is fragmentary and meaningless and hopeless until it is filled with the fullness of God. "O God," cried Augustine, "thou hast made us for thyself, and we cannot rest until we rest in thee."

Religion, then, is not an unnecessary and redundant addition to our life, a

traditional dogma that has now become an outworn superstition and wearisome burden, but it is just our life itself developed to its full completion and finest fruitage and blessedness. So far from being incongruous with or unrelated to our education, it is education carried to its highest power.

Education is a poor and pitiful thing when it merely develops the body and the mind and leaves the spirit starved and stunted. Only these spiritual ideals and divine influences can raise our life out of the dust and lift it starward. They will complete and crown all other results of education and round it out toward the perfect man.

To get education we must go to the masters who have it and can impart it. Personality is ever produced by personality. It cannot grow in isolation, but must unfold in a social atmosphere in which like begets like. Education is preeminently a matter of personal contact and contagion, and the higher it rises the more is it subject to this law.

Religious education must be obtained from religious teachers. Christian parents

and the ministers and teachers of religion can impart it in some degree, the prophets and apostles of the Bible, being men of religious genius touched with divine light and fire, can impart it in a greater degree, but the master Teacher stands in a class by himself, "a Teacher come from God," and "He that cometh from above is above all."

Jesus speaks as the Son of God with power on earth to forgive sin and cleanse us from all unrighteousness and draw us into full fellowship with the Father. All who come to him in faith and obedience shall be renewed in their hearts and slowly fashioned into his likeness until they "attain unto a full-grown man, unto the measure of the stature of the fullness of Christ."

Spiritual education also uses means, books and schools and exercises. The Bible is a great textbook, a mass of religious literature that stands incomparable and supreme among all the sacred books of the world, full of light caught by prophets and apostles who stood on mountain peaks of inspiration close to God. It is saturated with the religious experience of a race that was gifted with

spiritual genius which was illuminated and kindled into splendor by the Spirit of God. Altogether it is the greatest educational book in the world. Its words are spirit and life, and to read and absorb and assimilate it is to grow in grace toward the stature of the fullness of Christ.

The Christian home, with its religious training and example and atmosphere, must ever be a primary center and means of Christian education, and the church is the school of religion where we come into the companionship of common study and prayer, and thus gain its mutual help and inspiration. And the Christian graces, like the mental faculties, must be developed and disciplined by constant practice and service until they are wrought into habit and disposition in which they act spontaneously and are crystallized into Christian character.

The Christian school as truly has its proper place in our educational system as have the Christian home and the church. The teacher stands next to the parent in vital closeness and touch to the child and student and insensibly imparts moral and spiritual influences to the soul. A

Christian teacher, by the unconscious influence of his example, without ever saying a formal word on the subject, can yet lead scholars into the Christian life.

We cannot introduce religious instruction into the public school supported by public taxation, but we have a right to demand and see that the teachers are of Christian character and influence and that the atmosphere of the school is friendly to religious faith and life. A teacher of irreligious and skeptical worldly spirit in the schoolroom is a contagious danger to the scholars. An agnostic, sneering professor in a university can infect the whole atmosphere of his room with the germs of materialism and irreligion. Most of the teachers in our public schools and professors in our universities are men and women of Christian faith and character and influence, and these are the saving salt of these institutions.

But because religious principles cannot be expressly taught in public schools it is necessary that we should have distinctively Christian colleges. These are usually denominational schools, either in origin and control or else in spirit, and they have

played and still play a large and vital part in our educational life. While they are necessarily connected more or less formally with particular denominations, yet they are as a class quite unsectarian in spirit and are equally open to youth of all religious communions. They are also smaller colleges than the great institutions, and in this they offer the advantage of closer work and sympathy between the professors and students. These institutions should be loyally sustained by their denominational supporters and by the public at large, for they are fountains of the most vital education; and our young people in choosing their schools should consider their claims and advantages.

A full-grown personality! This is the aim and the ideal of education, even as outlined and so admirably described by Huxley; not a stunted and dwarfed, ill-proportioned, one-sided and misshapen human being, but one that stands full and finished at every point; not an over-developed, lusty body with an ignorant mind, or a powerful and polished intellect with a feeble conscience and low ideals and selfish passions, without God and

without hope in the world; but with all powers—physical, intellectual, and spiritual—developed into symmetrical and perfect personality.

Yet personality contains other elements than bodily vigor, developed intellect, regulated feelings, disciplined will, and religious character and life. It is these plus an atmospheric envelope, an elusive spirit that cannot be caught and defined. A strong or rich or fine personality has something about it that escapes our grasp and may be inexplicable to us and even to the person himself.

Some of these atmospheric elements are a sincere sense of truth, a texture of reality in the soul free from affectation, insincerity, deception, or falsity; deep convictions that are immovable roots out of which the whole character and life spring; unity of the soul in which all elements, and especially all discordant factors, are fused into one molten fountain and stream; unconsciousness of self, for self-consciousness distracts the unity and spoils the beauty of the soul, and unconsciousness of self is the final touch of perfection; a lively sense of interest in

human life in all its forms; effervescent feelings, broad and fluent sympathies, unaffected unselfishness, a sense of humor, kindness and courtesy, grace and charm of manner—these and other elements in varying degrees and combinations blend and melt into that subtle atmosphere that surrounds a strong and fine personality, and contain its secret. While these elusive ingredients that constitute the overplus and delicate aroma of personality are not under the direct control of the will, yet they can be reached indirectly and thus can be cultivated.

This ideal should be the aim of education as it is of religion, and should be pursued through all its grades, from the primary school up through the university. The ideal school will do something for the body, for the intellect, and for the heart, giving each its due proportion and emphasis; and the student and every one should be on his guard against a one-sided or stunted growth, and should strive to keep all his faculties growing together that he may obtain a symmetrical education and attain unto a full-grown personality and a full-orbed life.

VII

EDUCATION AS HABIT

We are highly plastic beings, and one object of education is to mold us into a system of good habits.

1. *What Is a Habit?* A habit is an acquired fixed way of acting. Anything, having acted in a certain way once, tends to act in that same way again. A piece of paper folded on a line forms a crease along which it folds more easily a second time; and all material substances are subject to this law. A new machine runs more smoothly after it has been in use for a time, and a suit of clothes grows to fit the figure and thus becomes more comfortable.

Organic beings are more pliant than inorganic substances and quickly wear grooves of action. The human body is highly impressionable and easily molded into habits. Muscles and nerves, having acted in one way once, tend to repeat the action, which in time grows auto-

matic. It is thus we learn to walk, speak, attend to our work, and carry on all the routine affairs of life.

Ideas, having been associated once, tend to cling together, and memory is a matter of habit. Judgments tend to repeat themselves and grow into fixed opinions or beliefs or prejudices. When we feel in a certain way once the same feeling on a similar excitation stirs the soul, and thus emotional habits are formed. The will wears itself into grooves of action along which it slips in unconscious smoothness and ease. Moral and spiritual experiences are repeated and thus character grows. "A character," said John Stuart Mill, "is a completely fashioned will."

Under this law of habit the whole body and soul are plowed and grooved into a system of habits by the automatic action of which we live. By far the greater part of all our activities, language, learning, conduct and character, work and worship, becomes cast and cooled in the mold of habit. Mental activities not only repeat themselves in habits, but also, like seeds, bring forth a multiplied harvest. This law has been expressed in the familiar

saying, "Sow a thought and reap a deed; sow a deed and reap a habit; sow a habit and reap a character; sow a character and reap a destiny."

2. *The Use of Habits.* The law of habit is of tremendous importance in life. It trains us into regular, easy, and accurate ways of doing things, releases us from debate and hesitation, effort and worry, sets us free to attend to novel situations, and lubricates life into delightful smoothness and liberty and joy.

Its results are seen in the skill and often the marvelous perfection with which we learn to do our work. The pianist strikes the keys of the instrument with a rapidity the eye cannot follow and yet no finger ever misses a key. At first these movements are made with awkward and painful effort and are attended with notes or noises that no one wants to hear; but perfection is reached through the long-continued practice by which the muscles and nerves are trained into automatic action.

At the same time habits take over these acquired activities and release the attention and all the faculties of the mind

and organs of the body to do other work. We thus walk without paying any attention to our steps. If we had to think about every step and calculate the problem of maintaining our balance, we could not do anything else; but we hand the whole matter of walking over to habit and give our eyes and mind to other things. This is an enormous economy of our time and attention and enables us to do many things at once, while we give our conscious attention and effort to novel situations and complex problems constantly arising which habit cannot solve.

Habit thus enables us to capitalize our past actions and acquired skill in an invested fund of autonomy that carries on the general work of life. It is "the enormous flywheel of society, its most precious conservative agent."

Good habits are steel tracks on which we can drive ourselves with speed and safety, or they are grooves in which our life slips with unconscious smoothness. They are the means of our liberty, giving to life its freest movement and fullest joy. On the other hand, evil habits are

chains that bind us and at last become bondage and bitterness from which strong crying and tears cannot release us.

We do not do a thing well until we do it without thinking how. No one is a good mechanic who must think about how to hold his tools; and no one has good manners who is thinking about his manners. Not until the hand has forgotten the painstaking processes by which it was trained does it have perfect skill. The musician must practice long that he may play without practice. So a mental principle or a Christian grace has not been thoroughly wrought into us until it acts unconsciously. Must an honest man try to be honest? No, he will be honest without trying.

"Boy," said a slave buyer to a black boy on the auction block in the slave market of a Southern city in the old days, "if I buy you, will you be honest?"

"Sir," said the boy, "I shall be honest whether you buy me or not."

Beneath the black skin of that slave boy beat an honest heart whose honesty was ingrained and automatic and did not depend for its action on any external

condition or even on any conscious effort.

Conscience ought to act without being asked, or our thinking about it. When a man must keep working with his stomach and lungs and liver he has a poor set of vital organs; the healthy man does not know that he has any insides. So when we must keep working with our virtues and must prod them into action they have not yet been educated into the perfection in which they will act spontaneously.

It is true that we can reach such perfection only through long discipline. We must try hard that we may do without trying. Moses "wist not that his face shone." He was filled with the glory of God and then he forgot himself. He did not know that his face shone, but others knew it. When through the discipline of education and divine grace we attain to any degree of perfection of personality, we do not need to tell others of it: they will find it out.

3. *Rules for Forming Habits.* Professor William James has a chapter in his Principles of Psychology on "Habit" which is a classic on the subject. He lays down four

rules for forming habits, which we here condense and state in nontechnical, popular language:

(1) The first rule is: Begin with all your might. When we start on any line of conduct with half-hearted decision and effort, timidity and hesitation, we are not likely to go far: hindrances will easily discourage us and turn us back. But when we feel the importance of the new course of action and concentrate our energies upon it we are likely to start off with such decision and momentum as will carry us through.

There are two ways of going in swimming. One way is to creep down into the cold water an inch at a time and every inch a shiver. The other way is just to leap in in one plunge. This concentrates all the slow successive shivers into one intense and glorious shock. It is then all over, and how splendid it is as one comes up all aglow with vitality and vigor. Some young people start to school or enter the Christian life an inch at a time, but the way to begin is to take one decisive plunge. Settle the matter once for all, burn your bridges behind you, and take

a step from which you will not turn back.

In further elucidation of this rule Professor James says: "Accumulate all the possible circumstances which shall reenforce the right motives; put yourself assiduously in conditions that encourage the new way; make engagements incompatible with the old; take a public pledge, if the case allows; in short, envelope your resolution with every aid you know." These subsidiary rules admit of easy translation into the terms of any particular habit or line of conduct. For example, in entering the Christian life they mean that we should intensify the motives for this life, go to church, and make a public confession of faith.

(2) The second rule is: Never suffer an exception in the practice of the new habit until it is thoroughly established. Each lapse is like letting drop a ball of string which one is carefully winding up; a single slip undoes more than many turns will wind again.

A rule given to public speakers is: "Dash cold water on your throat every morning when you wash, for three hundred and

sixty-five, not three hundred and sixty-four, mornings in the year." There are many habits to which this rule applies without exception. Truth, honesty, purity, patience, kindness, love—we are to practice these virtues always and everywhere, "for three hundred and sixty-five, not three hundred and sixty-four, mornings in the year." One single exception in these things drops our ball and unwinds more than we can wind back in many turns.

Rubinstein said that if he omitted his piano practice one day, he noticed it; if for two days, the critics noticed it; if for three days, the public noticed it. We can keep ourselves in fine tune and up to concert pitch in all our habits only by not omitting their practice in a single instance.

(3) The third rule is: Seize the first opportunity to act on every resolution you make. This warns us against feeling emotions and making resolutions without turning them into conduct. Such wasted emotions weaken us and wither our sensibilities and make it more difficult for us to feel and act the next time. Some

people like to indulge in emotion as a sentimental luxury. They even like to cry—when it does not cost them anything in the way of sympathy and service.

"The habit of excessive novel-reading and theater-going," says our psychologist, "will produce true monsters in this line. The weeping of a Russian lady over the fictitious personages in the play, while her coachman is freezing to death on his seat outside, is the sort of thing that everywhere happens on a less glaring scale." "There is no more contemptible type of human character," he further says, "than that of a nerveless sentimentalist or dreamer, who spends his life in a weltering sea of sensibility, but never does a concrete manly deed."

Act! act! is the urgent admonition of this rule.

(4) The fourth rule is: Keep the faculty of effort alive in you by a little gratuitous exercise every day. That is, be systematically ascetic and heroic in little unnécessary points, practice your habit on the margin of effort where it begins to pinch as drudgery.

Professor James ingeniously likens such

asceticism to "the insurance which a man pays on his house and goods. The tax does him no good at the time, and possibly may never bring him a return. But if the fire *does* come, his having paid it will be his salvation from ruin. So with the man who has daily inured himself to habits of concentrated attention, energetic volition, and self-denial in unnecessary things. He will stand like a tower when everything rocks around him, and when his softer fellow-mortals are winnowed like chaff in the blast."

This rule warns us against indulgence in relaxing our habit after we have acquired it. We must keep our habit in condition as the athlete keeps himself in fine fettle by gratuitous exercise every day.

These are the rules of a master psychologist, who says their "ethical implications are numerous and momentous." They apply to our whole system of habits —physical, mental and spiritual—and they will develop in us such habits as will make our life regular and certain, smooth and delightful, masterful and fruitful.

VIII

EDUCATION AND EXPRESSION

EDUCATION develops the power of expression. A mind shut up within itself, however splendidly it may be endowed or richly stored with knowledge, is yet a dead sea into which many streams run but out of which nothing comes. While no mind can be wholly self-contained, and every mind must find some expression, yet even educated minds differ enormously at this point. A mind of comparatively meager resources may outstrip one of larger and richer mental life, because it has freer channels through which it can pour itself in forceful streams to drive the machinery of the world or to fertilize the fields of life.

Language is one of the most important means of mental expression, and is a vital part of education. A word is a symbol that expresses and transmits thought, the sign of an idea, the bridge that connects one mind with another, a telegraphic or

telephonic wire that discharges the contents of one mind into another. It is a winged idea which flies from one mind to another and there unloads its burden of meaning; it is a crystallized thought, which, being transported from one mind to another, dissolves back into its original thought so that the two minds are saturated with the same meaning, or they think as one.

Words are plastic and iridescent to express all the shapes and shades of thought. They are clean-cut, like sharply minted coins, with clearness and precision, or they are multilated and muffled with vagueness and obscurity. They gleam and sparkle with cheerfulness and wit, or they are heavy and depressing with dullness and stupidity. They are icy cold with haughtiness, or warm with sympathy. They shoot to their mark as poison-tipped arrows, hissing with hate, or they breathe tender and ardent love. They speak poniards, and every syllable is a stab, or they drop dew and honey. They can forge ponderous anchor chains of thought, or spin the most delicate silken threads of sentiment.

They weave the web of our common conversation, transact all our business,

write our newspapers and books, and produce all the glories of our literature. They furnish the novelist with the colors for his pictures of life, the poet with the airy draperies for his dreams, and the orator with the majesty and music of his eloquence.

Words have in them the promise and potency of all life. They are big with the issues of time and eternity. They have kindled wars and slain empires, and they have been the white-winged angels of peace. A single word has saved a soul or broken a heart.

There is no use in seeing things unless we can say them; and we do not really know more than we can say. Style is not thought, but it is the door that sets it free, or the dress that makes it attractive, or the power that drives it home. Knowledge is steel in the bar; forceful expression is the same steel in the keen polished blade. Knowledge is electricity stored up in the battery; vivid expression is the bright, swift flash. Knowledge is the bullet; style is the powder that sends it to its mark.

Wonderful is the power of a striking

sentence; phrases have made history. To be able to put a thought into forceful statement, apt phrase, or brilliant epigram is often to carry conviction and win the day.

Some of the primary virtues of good style are clearness, conciseness, simplicity, directness, purity, force, and finish. Such a style costs time and unwearied practice and patience, but it is one of the most powerful tools of life, one of the finest of accomplishments, and is one of the highest products of education.

"The greatest thing the human soul ever does," says Ruskin, "is to see a thing and then tell in a plain way what it saw." We may not think that he told us anything in a plain style in his pages of gold incrusted with gems, but then he did tell us in a plain way what *he* saw. And former President Eliot says that if there be any one mark of education, it is the ability to express one's thoughts in clear and accurate language. Choice diction is a fine art and a beautiful accomplishment. Words fitly spoken are like apples of gold in baskets of silver.

This is a faculty and a grace that every-

one can in some degree acquire, and to few subjects should students give more effort and assiduity as they persistently endeavor to discover its principles and master its art. The practical value of their education will in no small degree be measured by their proficiency at this point.

IX

EDUCATION AND APPRECIATION

How big is your world? We might think that we all see the same stars and that one man's world is just as large as another's. But not so: everyone's world is bounded by his knowledge and insight and everyone sees and lives in his own world. The ox has eyes as good as ours, but its world is confined to its pasture field and feed trough and never gets outside of this little horizon. Some human beings are yet in the bovine stage of existence.

The scientific man lives in an immensely larger world than even the average educated person, because he has penetrated farther into the spaces and recesses and mysteries of nature. "When Alfred Russel Wallace," we read, "was gathering in South America his botanical and zoological specimens, the natives of the Amazon Valley thought him mad. He paid them handsomely to catch creatures for which they could discover no use at all. To

him the great forests of Bolivia and Brazil were alive with sensation. They fascinated and enthralled him. But the black men could not understand it. They saw no reason for his rapture. Yet his wonder was not the outcome of ignorance; it was the outcome of knowledge."

The artist sees a world of beauty to which other eyes may be blind. When Turner showed one of his sunsets to a friend and the friend remarked that he had never seen such a sunset, the painter replied, "Don't you wish you could?" Ruskin, illustrating Turner's range of interest, says of him: "One hour he is interested in a gust of wind blowing away an old woman's cap; the next he is painting the Fifth Plague of Egypt. A soldier's wife resting by the roadside is not beneath his sympathy; Rizpah watching the dead bodies of her sons not above it. Nothing can possibly be so mean that it will not interest his whole mind and carry away his whole heart." As everyone sees his own world, the size of the world that is seen depends on the size of the mind that is seeing.

Education enlarges and enriches our

appreciation and enjoyment of the world. It broadens the mind so as to bring it into contact with the world at multiplied points. The undeveloped man touches it at only a few points, mostly those of his physical appetites and needs. As the mind unfolds it begins to throw out its awakened faculties, like so many sensitive antennæ or tentacles, to lay hold of the world, embrace the globe and reach out among the stars until they impinge on the outmost rim of the universe.

All the senses are to be trained and refined to perceive the wealth of interest and beauty in the world to which the undeveloped mind is blind. Nature then discloses wonders that were never dreamed of before. Earth and sea and sky become a grand picture language that are ever eloquent in thought and replete with beauty; blossom and bird, grain of sand and stupendous starry constellation are crammed with interest and mystery, fascination and entertainment.

Science and literature and art are vast worlds of the purest enjoyment. The educated mind sees the world through the eyes of the men of genius who have un-

veiled and glorified it and beholds it suffused with many-colored splendor. It possesses all things through the ownership of appreciation, and can say with Emerson:

"I am owner of the sphere,
Of the seven stars and the solar year,
Of Cæsar's hand and Plato's brain;
Of Lord Christ's heart and Shakespeare's strain."

Education makes us rich in inner resources. It fits up and furnishes the mind as a home and library that contains the means of its own contentment and satisfaction. It makes us our own best company so that we can have a good time with ourselves. "The world is too much with us," so that we are too dependent on its scenes and excitements. Some people are always craving a crowd, itching for a new thrill. Left alone, they are instantly discontented and miserable. They have no inner resources and must seek diversion and entertainment outside of themselves.

Education releases us from the tyranny of the external world and enlarges our inner world of freedom. It brings us into

full possession of ourselves and then we have found our richest and most abiding wealth and worth. The degree of one's real education is measured by the width and depth and delicacy of its appreciations. A narrow and barren mind has few interests and enjoyments, and a mind of broad education lives in a large and wealthy world. Our real treasures must ever be within, and we should strive to deepen and enrich our minds so that we shall be largely independent of the world and careless of its vicissitudes. Jesus told his wondering disciples that he had meat to eat that they knew not. Especially does true education enable us to appreciate relative values in the moral and spiritual field so as to put first things first and be rich in the things of the spirit.

Human life is growing increasingly complex and rich. The savage lives close to the ground on roots and in caves and has few wants and aspirations and enjoyments beyond elementary physical needs. Our civilization has built around us an enormously wider and loftier world of physical and intellectual and social and spiritual needs and world-wide interests. We now

have countless possibilities of satisfaction of which primitive people never dreamed. Mere physical subsistence has become the smallest part of our life. We live in the spirit more than in the flesh and have affinities with the boundless worlds of science and literature and art, of business and trade and travel, of national and international affairs, of humanity and of the outmost circle of the heavens. "To me as Antoninus," said the Emperor Marcus Aurelius, "my city is Rome, but as man it is the universe."

Blind eyes and deaf ears may be in the presence of the most splendid visions of beauty and the grandest symphonies of music and see and hear no more of these wonders than an ox or an oyster. So may we live in our grand world and be blind and deaf if our mental and spiritual faculties are not awakened and trained to perceive and enjoy it. A broadly developed and richly stored mind lives in a vastly bigger and better world than a narrow, meager mind because it has more soul to see with. We should get education above all other getting in order that we may be born into our great modern

world, move in its cosmic currents, sit in its grand amphitheater, and see and appreciate all that is going on, and thus enter into our splendid birthright and opportunity.

X

EDUCATION AND EFFICIENCY

WHAT use is education? Perhaps a few people still think it is of no practical use or importance after it has passed the common-school grade, and may believe it is only a fashionable fad or luxury of the rich. Others think it is only a way of escaping work and being able to wear white collars and cuffs; and still others may consider it as the means of getting and holding some genteel and easy job of standing behind a counter or clerking in a bank.

Such ideas, of course, are mere prejudice and blindness. Education is developed manhood, disciplined personality, and this is the necessary condition of all worthy life. Education does not train our youth away from practical life and honest hard work, but trains them for work. Any sort of work, even digging a ditch in a street or field, requires some degree of knowledge and skill; and as work grows

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more complicated and finer it calls for larger knowledge and higher skill.

It will not be affirmed that no one can achieve success in the various fields of life without the education that is obtained in the higher schools. Occasionally there turns up a self-educated man, such as Herbert Spencer who has never attended a university or college, and yet attains eminence as a scholar or in some other line. But such men are exceptional in ability or in diligence, and even they might have reached fuller development and greater power if they had gone through the schools. Even Herbert Spencer would have had a more symmetrical education and a more catholic mind, and probably would have been a sounder thinker, if he had had a university training.

The chief advantage of a school is its atmosphere and associations. It is contagious in its mental and social life. There is little education in a book, at least for youth, because a book has no personality; and it is personality that is power in education, so that Mark Hopkins on one end of a log and a student on the other constitute a university. We send

our children and youth to school and college that they may be immersed in its intellectual and social life and come into contact with inspiring personalities, and then they may absorb the vital spirit of education, that subtle element that we call culture, through the very pores of their skin.

Such education fits one for his work in life whatever it may be. It puts him in possession of himself. It develops him into a disciplined mind that can thread its way through any subject, sift and arrange its facts into order, and put them together in sound judgments by which he can achieve his ends. Education is trained ability that can quickly see what is to be done and how to do it, and such ability rapidly pushes to the front and wins in any field.

The world is becoming more and more specialized in all its fields of labor, competition is growing keener and standards are rising higher, and as a result the workers of to-day and to-morrow must be more highly trained and more efficient than the workers of yesterday. No one can hope to be successful as a lawyer or

physician or minister or editor or engineer to-day who is not equipped with a first-class general and professional education. The medical education of yesterday is now so antiquated that it would not permit one to pass an examination for entrance to a medical college. The same fact is true of all other old-time learned professions, and besides these many new professions and technical callings have come into our modern world that demand a high degree of special training.

Applied science is the mother of invention and progress and is constantly devising better means and methods of agriculture and manufacture and transportation, and is thus lifting the world far above the physical condition of primitive people. It is the general intelligence in the community that enables men to learn and carry on the complex mechanical processes of our industrial world. Ignorant men simply could not make and manage these machines; and if we shut off the light of education, these great industrial plants would wither as vegetable plants droop and die in a drought. To maintain and improve our intricate material civil-

ization we must keep up our educational institutions, that they may send out their stimulating light and irrigating streams.

Many of our business men now have a college education, and a man has no chance for even entering the learned and technical professions without thorough preparation. The parents of the rising generation should see this, and young people should see it for themselves, and they should press with eager feet into all the avenues of education from the primary school up to the higher institutions. It is not being maintained or implied that all young people can or should endeavor to go to college and a professional school, but such education is the necessary condition of service in these higher fields.

XI

EDUCATION AND LIFE

EDUCATION not only imparts efficiency in technical work but it also fits one for living in all human relations. We must beware of materializing education into a mere means of making money or winning success in life. This is to turn its light into darkness, and then how great is that darkness! Then a man sees in a field only so much corn and pork, in a forest only so much lumber, and in a mountain only so much coal and pig iron; worse than this, he may use his education only to get these resources and products away from their owners without proper compensation. But life is more than meat, and the body than raiment, and while education does produce material goods in greater abundance and finer quality, yet it does infinitely more than answer for us the questions, What shall we eat? and What shall we drink? and Wherewithal shall we be clothed?

EDUCATION AND LIFE

There are two extreme theories of the nature and object of education. The one is the view once popularly entertained that education is a special privilege and artificial distinction, marking a man as belonging to a favored class and separating him from common work and life. The college graduate was viewed as a man apart, who was not expected to take a hand in the rough work of the world. He was pale of face, with a scholar's stooped shoulders and unsoiled and uncalloused hands. Formerly when a boy came back to the farm or village from college with the mysterious sheepskin of a diploma which seemed to be charged with magic charm and power, he was regarded as a kind of superior if not sacred being, who was idolized by his family, treated with obsequious deference by the community, and was not expected by anybody to do any work.

College courses were also shaped along the lines of preparation for the learned professions and a scholar's secluded life, and ancient languages, mathematics and philosophy were the principal studies in the curriculum in which there were no

options, while the more practical subjects of modern languages and applied science were given small room and welcome and were rather regarded as intruders from the workaday world. This was the purely cultural theory of education.

Extremes beget extremes, and reaction is now swinging to the opposite pole at which the disposition and often the practice is to cut out cultural studies and put the emphasis on utilitarian subjects. Already Greek and Latin have been cast out bodily from many colleges and universities and are no longer required either for entrance or graduation. Every study now must show that it bears on practical life, which means business and money-making.

A college graduate on this theory of education need not know any other language than his native tongue, unless he wants to use it in the markets of the world. He need not know mathematics beyond the range of his practical computations in figuring out his profits and income tax. He is not expected to know much about philosophy, but he must be able to analyze pig iron or know how to cure

pickles. He may know little about the soul, or whether he has a soul, but he must know all about soils. The pressure away from cultural education toward utilitarian and technical training for business is gaining in popular urgency, and the extent to which even our older universities have yielded to this demand is causing serious concern to our conservative educators.

There is truth in each of these extremes, and the truth as usual lies between and combines the true elements of both. The true view of education is that it is not a means of separating a man from his fellow men by an artificial and sacrosanct distinction, but of uniting him more intimately and usefully with them; and it is not simply or chiefly a means of making a living but a means of making a worthy life.

The educated man is not by his education set apart from or unfitted for human society and service; if that were its nature and effect, the less of it the better. Education is not an easy way of escaping work and living without perspiration. It is not synonymous with starched linen and a

silk hat. Even the white necktie has lost its significance and is almost as likely to be worn by a gambling sportsman as by a minister.

The educated man is by his education all the more a man, developed and full-grown in all his faculties, fitting into human society in all its relations and the more efficiently filling his place and doing his work in the world. He has wider visions and more fluent sympathies so that he is able to enter into other men's conditions and needs and rights more fully and helpfully. Instead of being narrow-minded and lopsided by reason of his education, he is more of an all-around man, full-orbed in his human nature and life.

It goes without saying that there is truth in the utilitarian theory of education. Preparation must precede practice in every field. We are not born with skill, but only with the possibility of it in germinal faculties that may be unfolded and trained into skill. No one can offhand run a locomotive, or perform a surgical operation, or preach a sermon, or play a piano. We cannot extemporize a wheatfield.

But, on the other hand, there is a vital truth in the cultural theory of education. Preparation for any work must be broader than the work itself. One cannot become a good lawyer or physician or minister by rigidly confining his preparation to law or medicine or theology; he must have a broad knowledge of other subjects for efficient service in these fields. Even a mechanic needs to know more than simple acquaintance with the tools and materials with which he works. To do what one does well he must know more than he does. Whatever enlarges the mind and enriches the emotions and disciplines the will prepares for better work in any field.

This is why young men now go to college to prepare for any line of work as well as for the learned professions. All knowledge is related, and Greek and Latin, logic and philosophy are not remote from and useless in the practical affairs of life, but contribute to that general training and broad thinking that are the basis and means of success in any field of service.

The old education aimed at general culture, and so far it was right; but it

went too far in separating culture from life. The new education is in danger of going too far in the opposite direction of divorcing life from culture. We must keep the two together and make them help each other and round out life into its full-orbed sphere. Living is the chief duty of life, and education is to enable us to do this chief thing better and raise it to its highest level of fullness and efficiency.

XII

EDUCATION AND SERVICE

ALL these powers of education should run up into service. A highly complicated and costly mechanism, such as a watch or a locomotive, should pay for itself in work done. The more expensive it is the more work it should do. An educated personality is a very expensive product; society has taxed itself heavily to produce it, and therefore it should justify itself in service rendered. It is deep selfishness and base ingratitude for one to acquire an education that equips him with large powers and then turn them to purely personal ends, such as money-making or pleasure-seeking, or to mere æsthetic culture, or to gilded ease and idleness.

Education that simply lets one slip through the world so as to escape productive work and avoid one's share of responsibility for the world's welfare is a blight to the community and to the soul

itself. This turns the soul into a sponge that sucks up everything around it, instead of making it a fountain that sends forth refreshing streams. The educated man is that much more of a man and should be of that much more use to the world. His eye should be clearer to see human needs and his heart kinder and his hand abler to meet them. His shoulder should be the stronger and the readier to go under the burdens of his fellow men and to help carry the load of the world's need. His presence should be so much wisdom and inspiration and cheer in his own circle and in the community. The wider his education, the stronger and richer his personality, the wider and deeper should be his sympathy and service and sacrifice. Much has been given to the educated man and woman, and of them is much justly required.

The educated man and woman enter the world as so much leaven to impart the contagion of higher life to others. They go out as light-givers and light-reflectors to radiate and diffuse light through the whole community. It is highly important that we should have

professionally educated people among us, but it is more important that we have general intelligence and ethical character diffused through the whole mass of society.

The mountain ranges and peaks must send their waters down to irrigate the plains, or their value vanishes. So the social value of professional scholars consists of their power to stimulate and enrich the common people.

It is not the direct light of the sun that fills our homes and illuminates the world, but the sunlight as it is reflected and diffused everywhere by the countless particles in the air. Educated people have freely received light, and now they should freely give it. For them to receive the light of education and then refuse or fail to impart it to others would be as selfish as if they, having found their place in the sun, were then to try to crowd others out of its light, or were to try to absorb all its light and shut it off from the rest of the world. We get this light that we may give it; and, in fact, giving it is the best way of getting it, and in this field it is literally and abundantly more blessed to give than to receive.

XIII

EDUCATION AND PUBLIC SUPPORT

THE social blessing of education is the reason it should and does receive public support from the common school up through the high school to the college and university. Some people may look on this support as a way of taxing the many in the interest of the few, but this is a short-sighted view. Our schools of all grades are fountains of intelligence that pour their streams out over our whole human world as the clouds shed their rain over all the hills and valleys. Shut them up or curtail them by withholding public support, and we would dry up or diminish these streams at their source, and then all our life would wither in the drought and blight.

We owe it not only to our children and to all our youth, but also to ourselves to keep these sources of education well supplied. In hardly any other way than by

these taxes does our money do so much good for us and for our human kind, and to cut off this support would be to save a few dollars at the expense of personal and public disaster. No one is so unintelligent as not to see the use of the clouds in the atmosphere and the sun in the sky. Everybody ought to have the discernment to see that our schools are clouds full of rain and suns radiating light, and be glad to contribute to their support. Our higher institutions of learning are almost without exception in pressing need of larger endowments, and they make a strong appeal to men of vision that have means to aid them. Such gifts are a wise investment that will long serve the world.

XIV

EDUCATION AND LEADERSHIP

THE great men of the world are its makers. They create history. They are the mountain ranges and peaks that determine the course of rivers, carve the continents, build the plains and sow them with wheatfields and orchards and cities. Cut them down to the level of common men, and the whole history of the world would be altered and dislocated. Abraham and Moses, Isaiah and Paul, Alexander and Cæsar, Plato and Socrates, Confucius and Buddha, Shakespeare and Milton, Washington and Lincoln, Newton and Darwin —how would the course of history have been changed and the level of the world lowered if these great personalities and creative geniuses had not upheaved the continents and pushed up the peaks of civilization! From the slopes and summits of their thoughts and deeds have descended streams that have cut the channels of history and watered the plains

of the world. And who can calculate the enormous and infinite loss to the world were Christ stricken from the centuries!

War that strips off all our illusions and uncovers things down to their naked reality is a terribly severe teacher of the necessity of competent leadership. Lincoln was handicapped through three years of failure in the Civil War until he found "a man that would fight." He found Grant, and then that dogged fighter forged the scattered links of the Union armies into a continuous iron ring around Richmond that soon forced its surrender and the collapse of the Confederacy.

The Great War taught the same lesson on a colossal scale. The Allies muddled through three years of mistakes and disasters with divided generalship and isolated armies and broken fronts. At last the necessity of dire extremity and imminent ruin forced unity of action under a single head, and almost from the day that all armies along all fronts were placed under the supreme command of Foch, the Germans were checked and then turned back and kept on retreat until they were beaten to their knees, begging for mercy.

This man, however, was no accident or favorite of fortune. He did not get his place by seeking it, much less by political favoritism or wire-pulling, but he was the product of long and severe preparation. From youth he had been a student of military affairs, for years he was a professor of tactics in a government military college, he had been tried out in the arduous school of experience on the field of battle, and so at last he stood forth by the principle of natural selection as the one man fitted for and equal to the great place and mighty work that fell to him in a supreme hour and crisis and agony in the history of the world.

But not only are these overtowering personalities the makers of the world, but so also in a lesser degree are all those who are called to places of leadership among us. The statesmen of any country to-day hold its destinies in their hands. The captains of industry are the builders of our great business enterprises, and without their leadership these vast combinations of capital and labor would go to pieces. The newspaper editor wields an enormous influence in shaping and

coloring as well as disseminating information and in determining public opinion. The lawyer leads in his field, the physician in the hospital, and the minister in the pulpit. Quiet thinkers in their university chairs and investigators in their observatories and laboratories are leaders in the fields of widening knowledge and are thereby molding the thoughts of millions of men and of coming generations. Every city or community or country is largely what its leaders have made it. Bolshevism began by murdering its "intelligensia," or its intellectual and ruling classes, and then came swift-footed anarchy and chaos and night.

The fields of leadership have multiplied in our day, and demand thorough preparation as never before. No one is born with a birthright of leadership since kings have so generally gone out of business; and even kings must get ready for their office through long and arduous preparation. Rarely is leadership the result of mere favor or fortune. Young men in beginning their work often look up to the men in high places and wonder how they got there; and they are apt to think that

these successful men were boosted into their positions by powerful friends or by some kind of "influence," or that they climbed up by cunning arts and intrigue. And so they are in danger of setting about seeking and getting such places by illegitimate means.

It is not to be denied that there is some measure of good fortune in such success and that influence does often put men in desirable places. But let no young man count on these things. Few are the men in high positions who got there by such means. Washington was not an accident in his day, and Lincoln was not picked out and put in his place by partisan politics. Great men have blazed their own way to fortune and left footsteps behind them for us to follow. Worthy leadership cannot be inherited or bought or got by influence, but must be won by rising on the arduous steps of deeds done.

Education is the necessary preparation for leadership in our day. An ignorant man can only follow the leader or boss and do the lowest work in the world. Even to be a good farmer or mechanic now demands trained intelligence, and

young men go through the high school and the college to follow these callings. Much more does it require a high degree of preparation to be fitted for leadership in teaching, journalism, engineering, large business management, as well as in law, medicine, and the ministry.

The ministry especially calls for men of large ability and clear vision and ample equipment of expert knowledge and skill to lead the Christian forces of this age in the immense task of working out the social gospel and building the kingdom of God in the world.

Let no one be so shallow and conceited as to think that he can succeed in any of these specialized fields without proper training, and if he is so ill-advised and foolish as to try it, failure is his sure fate. It is no longer respectable or lawful to attempt professional work without a professional diploma. The price is high, but the privilege and the reward are great.

Never did the world demand such high leadership as it must have to-day. It now lies shattered at our feet by the war, and upon us is thrown the gigantic task of rebuilding it into a better world. We

ought to be glad that we are alive in this great day and have a part in this immense work, "dwelling in a grand and awful time, in an age on ages telling," when simply "to be living is sublime." It gives us something great and worth while to live for, and it will help to make us great if we throw ourselves into it with utmost devotion. But only competent leaders can guide and inspire this work, and only those who have native abilities which they have developed and trained to their utmost powers can be such leaders. Let our youth get ready for their task.

"God give us men. A time like this demands
Strong minds, great hearts, true faith and ready hands.
Men whom the lust of office does not kill!
Men whom the spoils of office cannot buy!
Men who possess opinions and a will!
Men who can stand before a demagogue
And damn his treacherous flattering without winking.
Tall men, sun-crowned, who live above the fog
In public duty and in private thinking."

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